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AUTHOR	Brooks, Clifford J.
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ABSTRACT

A study investigated the way in which the field of bilingual education was represented in general periodical literature over an eight-year period (1988-1996). Content analysis methods were used to identify the percentages of negative, positive, and neutral abstracts found under the subject heading of "bilingual education" in the "Reader's Guide Abstracts" and "Reader's Guide Abstracts Select" on CD-ROM. Citations and abstracts from both sets were categorized by four raters as reflecting positive, negative, or neutral attitudes toward bilingual education. Results indicate an overwhelming proportion of negative abstracts in both resources, with the "Select" version having an even greater percentage. Publisher selection criteria and guidelines are examined in relation to standard collection development policy. Implications for bilingual education supporters and media specialists are explored. The need for additional content analysis studies in bilingual education is discussed. Contains graphs, tables, 12 references, and a 47-item bibliography. (MSE)

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Negative, Positive, and Neutral Views of Bilingual Education: A Content Analysis of *Readers' Guide Abstracts* and *Readers' Guide Abstracts Select*

Clifford J. Brooks

Forrest A. Irwin Library

Jersey City State College

Jersey City, New Jersey

FL 03217

U.S. DEPARTMENT OF EDUCATION
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Clifford J. Brooks

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

ABSTRACT

This research uses content analysis methodologies to identify the percentages of negative, positive, and neutral abstracts found under the subject heading of "bilingual education" in H. W. Wilson's *Readers' Guide Abstracts* and *Readers' Guide Abstracts Select* on CD-ROM. Citations and abstracts in both sets were accessed from an 8 year period and categorized by four raters as reflecting a positive, negative, or neutral attitude toward bilingual education. Results indicated an overwhelming proportion of negative abstracts in both resources, with the *Select* version having an even greater percentage. H. W. Wilson selection criteria and guidelines are examined in relation to standard collection development policy. Implications for bilingual education supporters and media specialists are explored. The need for additional content analysis studies in bilingual education is discussed. Graphs, tables, references, and an extensive bibliography are included.

INTRODUCTION

Readers' Guide Abstracts (*RGA*) and *Readers' Guide Abstracts Select* are two of the most popular tools consulted by the amateur researcher in his or her quest for information on a variety of current topics. All information science specialists, as well as most high school graduates, are familiar with the scope and sequence of the parent product, *Readers' Guide to Periodical Literature*. *RGA* and *RGA Select*, now available in CD-ROM versions, provide instant access to a wealth of data on contemporary subjects by combining computer technology with large scale, inexpensively archived data. In addition, the availability of expertly crafted abstracts accompanying each citation, as well as the user friendly format and interface, make these two resources potent tools for research.

Bilingual education is a timely subject which engenders discussion in a number of forums. It has, however, not been explored as thoroughly as similar topics of controversy. This study uses standard methodologies of content analysis to examine the extent to which the field is represented in general periodical literature over an eight year period. It also explores the possible existence of bias in the overall content of both resources, and in the selection process executed in compiling the *Select* version for the high school market.

REVIEW OF THE LITERATURE

Although much has been written about bilingual education, most articles either have been philosophical statements, analysis of research, or the results of research. The studies which have been undertaken normally involve students in given schools or school districts, and many times compare bilingual education student test results with those of

students who have covered the same material in a regular education track. One of the few researchers who began to look at bilingual education as it is represented in the content of computerized databases was Cziko (1992), whose article in *Education Researcher* begins with a search through the ERIC database to locate entries matching the descriptors "bilingual education and program evaluation" or "bilingual education and program effectiveness." However, Cziko does not focus his article on the content of the entries found, but rather provides an overview of seven major bilingual education evaluations and draws conclusions therefrom.

Other articles dealing with bilingual education also survey the results of evaluations, but none employs basic bibliometric or content analysis techniques. In fact, there has been almost no content analysis research undertaken in the field of bilingual education. Although content analysis is widely used in education, psychology, political science, and even linguistics, it has yet to become commonplace among bilingual education researchers.

This phenomenon is most surprising since bilingual education has become a topic of debate not only in the education field, but also in the political and social science arenas. Even the average citizen upon reflection can recount the effect of "marketing techniques" used by both the supporters and detractors of bilingual education. The same influence can be felt in every school and school district in the country which has experienced an influx of non-English speaking immigrant pupils. Content analysis, often an effective tool for the researcher probing propaganda techniques or discerning responses to trends or ideologies (whether written, oral, or auditory), should therefore

become a method of choice for those measuring reactions to adopting or rejecting current bilingual education philosophies.

Content analysis is a general term which refers to a variety of research techniques used to discern the meaning of documents and media in a systematic way. Weber (1990) supports the notion that content analysis strategies are useful in many disciplines and situations. In addition to simple numerical comparisons, it has been used to identify intentions and characteristics of a medium; detect the existence of propaganda; reflect the cultural or specified content patterns of a defined set or group; or describe trends in such diverse areas as library subject headings, keyword use, types of magazines, content of books, or even indexing. (9) Since so little has been done in the area of bilingual education and the popular magazine literature, and most library science studies restrict themselves to such bibliometric forms as citation analysis and subject heading analysis, a survey of content analysis studies was performed prior to undertaking the current research. The results indicate that as a research method in the social sciences, content analysis is heavily used in such areas as literary and feminist criticism, marketing, communications and mass media, and allied health and medicine.

In the area of psychology and language, Gottschalk and Rey (1990) applied the Gottschalk-Gleser content analysis scales to verbal samples from a defined class of Spanish-speaking individuals living in Orange County, California in relation to work-related injuries and emotional stress. The results were compared with a control group consisting of 20 Hispanic subjects, all of whom had not undergone recent emotional or physical mishap. Using their pre-determined rating system, the authors found indication of a high degree of anxiety among those who had experienced work-related injuries.

Journalism and mass communication are areas where content analysis techniques have been refined and implemented. Riffe, Aust, and Lacy (1993) compared the effectiveness of random, consecutive day, and constructed week sampling of newspaper content. They were most concerned with sampling procedure and confronted the issues of defining a population in order to achieve efficiency of time and effort. Another study in journalism involved a comparison of results of on-line searches to hand searches. Kaufman, Dyckers, and Caldwell (1993) advised academic researchers to be cautious of incomplete information gleaned from on-line databases when performing a content analysis. They pointed out that there exist differences between original editions and what appears on-line, and that variations in text itself can be found from database to database. Researchers were therefore encouraged to compare original documents with their database counterparts. A third communication article made the case for applying content analysis techniques to text related to political science. Simon and Iyengar (1996) advocated the application of theory-based research to the field of political communication. In addition to standard experimental designs, content analysis was suggested as a reliable technique in analyzing campaign messages, articles, and advertising. In fact, the authors examined newspaper coverage of the 1992 Senate races in relation to campaign advertising. Using content analysis methods, selected articles from the campaign were classified as either positive, mixed, or negative. The results were correlated with other findings on the demobilizing effects of negative advertising (Ansolabehere, Iyengar, Simon, and Valentino 1994).

A similar study was carried out by Imrich, Mullin, and Linz (1995) who looked for prejudicial pretrial publicity in fourteen major American newspapers over an eight

week period. The investigators found that over one quarter of the suspects described in crime stories were identified in connection with potentially prejudicial statements.

With the exception of several important studies, most content analysis in library and information science deals with subject content of serials. Devine and Berger (1990) analyzed the characteristics of periodical collections to evaluate subject coverage for collection management. Content analysis of periodicals was also the subject of a study conducted by Buttlar (1991). Not only were the gender-occupation affiliation and geographical location of the authors researched, but also the subjects of library periodical literature over a number of years. The findings documented aspects of the historical development of librarianship, and also reflected trends and issues which confront library practitioners.

One of the only studies that deals with periodical indices germane to the topic of this paper was undertaken by Zollars (1994). The author pointed out problems encountered when attempting to build a reliable sample for a content analysis of *Readers' Guide to Periodical Literature*. Although Zollars discussed aspects of research about culture indicators in relation to subject heading classification practices and pointed out that category shifts can serve as the same, no definite examples were given. More time will be spent on the type of content analyses undertaken in the field of library and information science under the Data Collection and Analysis heading.

METHOD

Subject

Readers' Guide Abstracts Select Edition (RGA Select) is a bibliographic database that indexes and abstracts selected articles from more than 240 of the most popular

general interest magazines published in the United States and Canada. Articles included in *RGA Select* are chosen for their permanent research value to school and public library patrons. Selection is done on an article-by-article basis and performed by professional librarians employed by the H. W. Wilson Company. *The New York Times* is also included, and H. W. Wilson states that "the focus of *RGA Select* is on entries especially relevant to the high school curriculum." Approximately 40% of the periodical articles in the complete *RGA* appear in *RGA Select*, with 18 periodicals abstracted and indexed from cover to cover (book reviews are excluded).

RGA Select also maintains its own guidelines for selection. In these guidelines are the words "research value," referring to those articles believed to promote reflection and knowledge about a given subject area. Most of the criteria deal with inclusion or exclusion of types of articles (book reviews, bibliographies, crime stories, humor, obituaries, profiles, speeches, sporting events, etc.), but do not treat standard library service issues of subject representation and collection development. Thus, it seems that if an article on a subject fits the criteria for inclusion because of its format, size, subject, and function, it is up to the selector to decide according to his or her own criteria if the content of the article is of research value. There is, therefore, a possibility for personal bias to enter into the selection process since no guidelines have been established.

The full *Readers' Guide Abstracts* on CD-ROM features abstracting and indexing of the 240 periodicals in the *Readers' Guide to Periodical Literature* plus *The New York Times*. Unlike the *Select* version, all 240 periodicals are indexed cover to cover. The CD-ROM product currently features indexing coverage from January, 1983 to the present, and abstracting coverage from September, 1984 to the present. The CD-ROM

version of *Select*, on the other hand, begins its coverage from June, 1988 to present. A library or media center subscribing to *RGA* normally receives a monthly update. Since *RGA Select* is produced with the school clientele in mind, a monthly, school year, or quarterly update option is available.

The H. W. Wilson Company was contacted early in September once the topic was approved. Since little research material exists dealing with either *RGA* or *RGA Select*, Wilson was extremely interested in the study. The Company also provided gratis the CD-ROM version of *RGA Select* with coverage from June, 1988 to July, 1996. In order to increase the validity of the study, it was decided to compare results of the search in *RGA Select* with the same search performed in *RGA*. Although a CD-ROM for *RGA* was not requested, the on-line version accessed through Ovid Software using the library information systems at Rutgers University was used in place of the disc. The same subject heading search was executed with the on-line database as had been done with the CD edition.

Data Collection and Analysis

It has already been stated that content analysis as a research method is used in a variety of disciplines. Reser and Allen (1990) surveyed how content analysis was being used in library and information science research. At the same time they addressed the problems of research methodology, category selection, bias, and analysis of materials. They went to great length to point out that two distinct methods of content analysis are apparent in most library literature. The first type, known as "classification analysis," relegates subjects to classes or categories and makes inferences from the data as to their

purpose and content. The second method, known as "elemental analysis," relies heavily on the identification of word or word group frequencies. Researchers who undertake this kind of methodology often search for the repeated occurrence of keywords or terms. This type of research has become more prevalent since the advent of computers and the keyword search engine, now a standard feature of on-line and full text databases.

Reser and Allen (1990) found that most of the content analysis studies carried out in the library field used a simple classification analysis methodology. They recommend to the researcher that a complete population rather than a sample be studied and that predetermined and well defined categories be constructed prior to undertaking the investigation. Most of the time the categories should be pretested; however, this is not required nor is it advisable in all cases.

In order to reduce bias and increase reliability, coders must possess a thorough understanding of the categories and share a common frame of reference. This can be assured by spot checking or running a reliability test. In a true content analysis, a pretest would be undertaken to gauge consistency prior to initiating the actual study. Thus the researcher could be assured of an acceptable level of reliability.

Data Collection Method

In order to test the possibility of bias in selecting articles about bilingual education for inclusion in *RGA Select* it was first necessary to limit the population to those abstracts which were included on the disk with coverage from June, 1988 to July, 1996. Since the subject of bilingual education is current, but not as popular as abortion, AIDS, or teenage pregnancy, it was felt that all of the citations appearing during an initial subject search could be used in the study. Although *RGA* has coverage beginning in

January of 1983, the Ovid search engine allowed for the imposition of a chronological limit on the subject set. Thus, similar sets could be generated and a comparison made between what appeared in *RGA Select* as a subset of the entire population for the same period in *RGA*.

In an effort to increase validity and reliability, three distinct categories were created to judge the abstracts generated from the indices. It was at first felt that four categories should be imposed, since a cursory review of the existing abstracts indicated several which might be judged as purely informational in nature. However, a second review of the literature demonstrated repeatedly that bias can often be found even in an informational context. Therefore, the three category system was employed and the readers advised to rate accordingly. The readers were asked to mark each abstract 1/positive if they felt the abstract presented a positive view of bilingual education, 2/negative if the abstract portrayed bilingual education in a negative light, or 3/neutral if there was no bias either way in the abstract or the article title. The readers were made aware of the possibility of bias in what appeared to be a descriptive abstract and to take note of the bias in their scoring. Because each citation is accompanied by an abstract of approximately ten lines which presents a summary of the article, it was not deemed necessary to create a word frequency or keyword list. The readers were simply instructed to read the abstracts and make a determination solely on the basis of the abstract's content. Each reader was queried as to their knowledge of bilingual education and if each understood the task required. Of course, each was requested to rate the data on content alone, and to attempt not to permit personal bias or opinion to enter into the decision making process. *RGA Select* was read first, and followed by the larger set found in *RGA*.

For the purposes of simple data manipulation and manageability, only four readers were selected to take part in the study. Because of the "popular" and "general interest" nature of the periodicals chosen for inclusion in the Wilson products, it was decided to choose readers that were not engaged in the field of education. The audience for the 240 periodicals indexed in *RGA* crosses social, economic, racial, and religious lines. To select readers from a specialized field was felt to be inconsistent with the choice of databases for the study. Furthermore, in order to vary the background of the readers themselves, two male bilinguals and two female native English speakers were asked to perform the same tasks. All were college educated and active in professions unrelated to bilingual education. One female is a Registered Dietitian at a large, metropolitan hospital. The other female serves as a library technical services consultant to a number of library consortia in the area. The two male bilinguals are involved in computer related professions. One of the men is of African descent, and both come from Spanish speaking households. It was felt that the bilingual subjects may have different perceptions than their monolingual counterparts, and that the data results would indicate some kind of discrepancy from which a conclusion could be drawn. In the case where someone other than the original researcher might have access to the data, it was decided to assign each reader a number for the purpose of anonymity and personal protection. The readers were instructed to mark all of their data sheets with their personal numbers to avoid the possibility of data sheets becoming commingled during the analysis phase of the study.

After receiving instructions from the researcher and completing the set of abstracts in *RGA Select*, the readers were asked to complete the larger *RGA* data at a

different time within twenty-four hours. Under no circumstances were they to refer to the *Select* set already finished, or use the *Select* set to code those abstracts which appeared in both. No changes were to be made to either set after completing the assigned tasks. Before handing in the data to the investigator, each reader was required to tally the number of positives, negatives, and neutrals for their results on a tally sheet which became part of the package. In this way, the researcher and the reader could be sure that all of the abstracts had been reviewed, since the final tally would reflect the total number of abstracts found in each set. Since three of the readers lived some distance from the research site, the data was mailed to the researcher for preliminary review. All readers were requested to keep copies of the data in case of loss, data audit, or unforeseen problems with the analysis.

Hypotheses

H1 There is a significant difference between *Readers' Guide Abstracts* and *Readers' Guide Abstracts Select* in the number of negative abstracts appearing when a search is executed under the subject heading of "bilingual education."

H2 There is an overwhelming number of negative abstracts in *RGA Select* when a search is executed under the subject heading of "bilingual education."

H0 There is no significant difference between *RGA* and *RGA Select* as to the number of negative, positive and neutral abstracts appearing under the subject heading "bilingual education."

FINDINGS/RESULTS

In order to examine the reliability of the results coded by all four raters, the Cronbach Alpha reliability test was run on the existing data. With N equaling the total

set of 105 abstracts (32 for *RGA Select*, 73 for the full edition), the alpha reliability coefficient for all four coders across the abstracts reviewed was found to be .7651 (.77). Although .8 is preferred in most situations, the .77 was felt to be acceptable for this type of study.

A review of the data indicates that raters one and two had similar assessments; rater 3 tended to code items more positively than the others, while rater 4 demonstrated a tendency to rate more negatively. The accompanying graphs and percentage tables (see pages 19-23)substantiate these statements, and establish without question the fact that there was a greater number of negative abstracts found by all raters within both distinct sets.

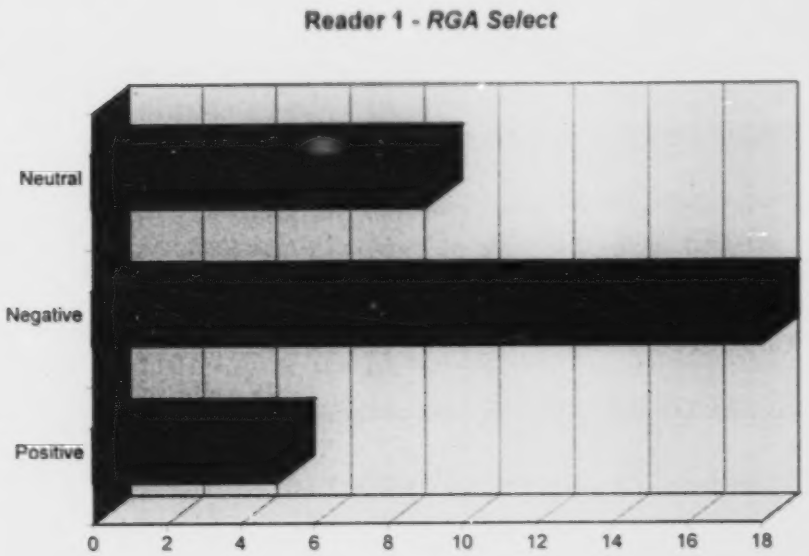


Figure 1: Chart of Reader 1's Tallies of *Readers' Guide Abstracts Select*

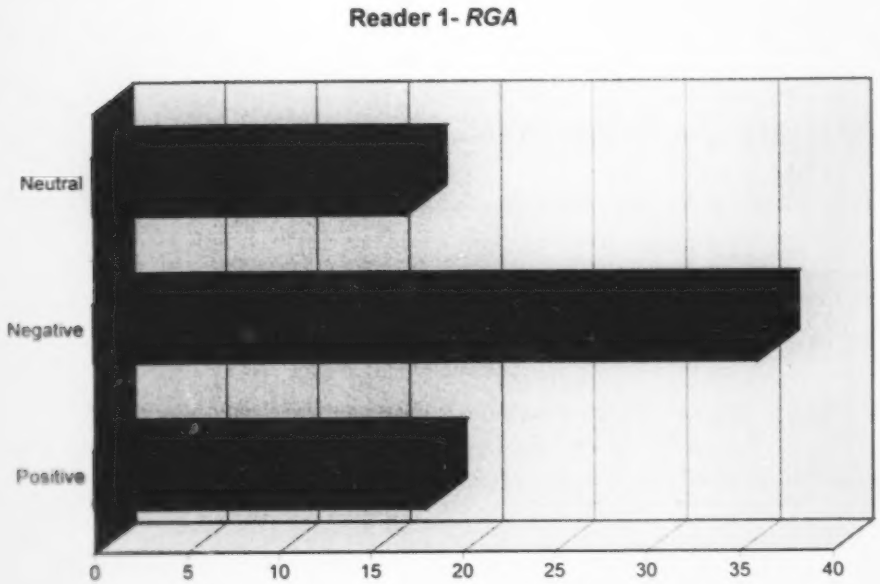


Figure 2: Chart of Reader 1's Tallies of *Readers' Guide Abstracts*

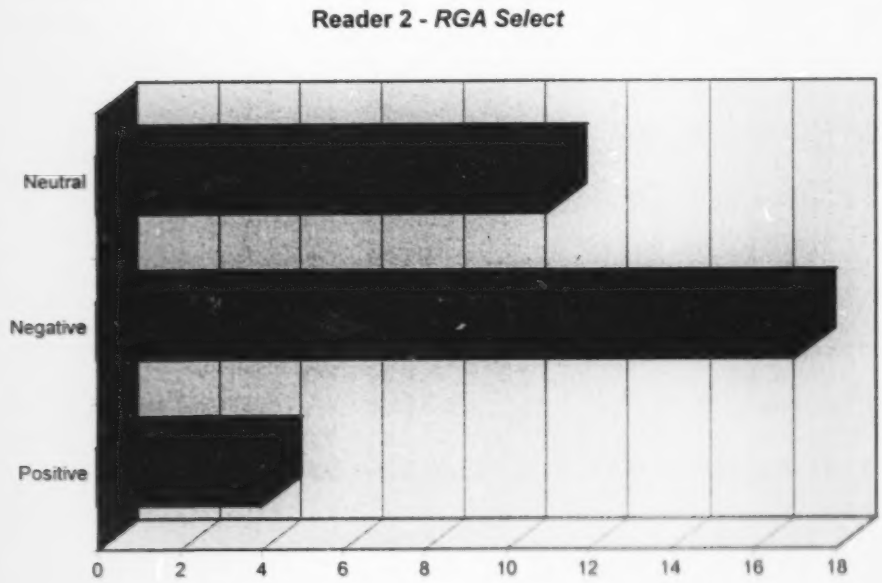


Figure 3: Chart of Reader 2's Tallies of *Readers' Guide Abstracts Select*

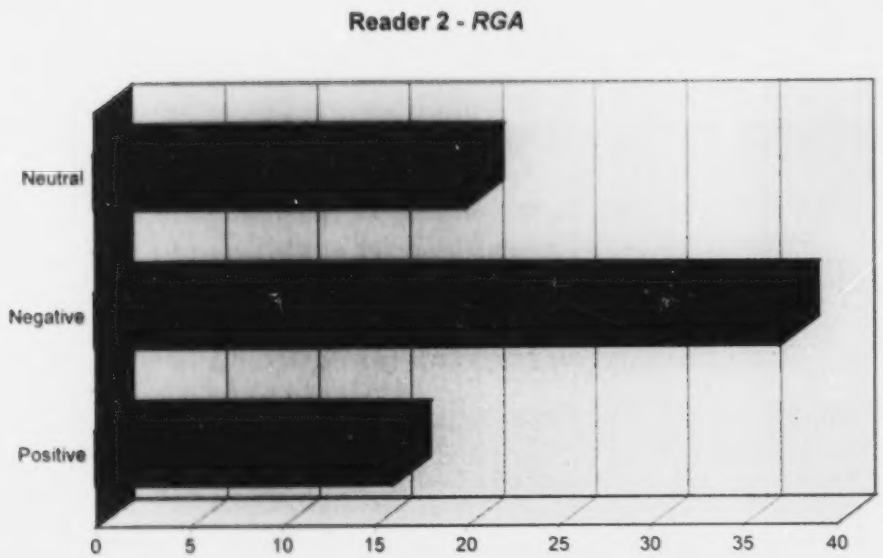


Figure 4: Chart of Reader 2's Tallies of *Readers' Guide Abstracts*

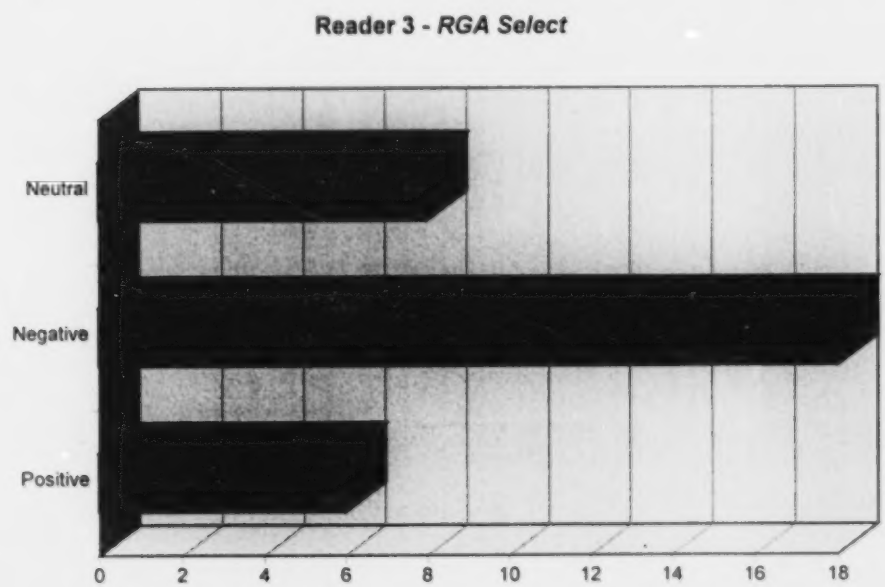


Figure 5: Chart of Reader 3's Tallies of *Readers' Guide Abstracts Select*

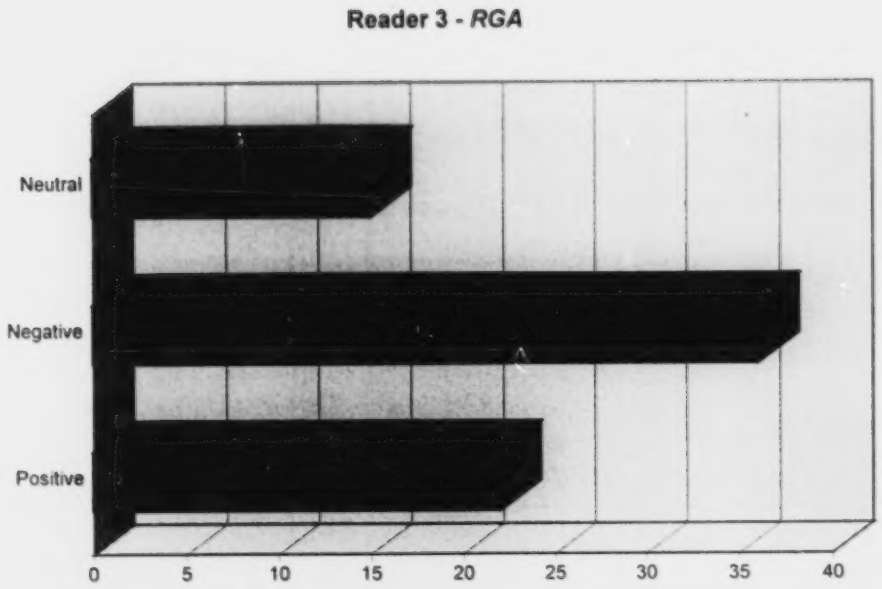


Figure 6: Chart of Reader 3's Tallies of *Readers' Guide Abstracts*

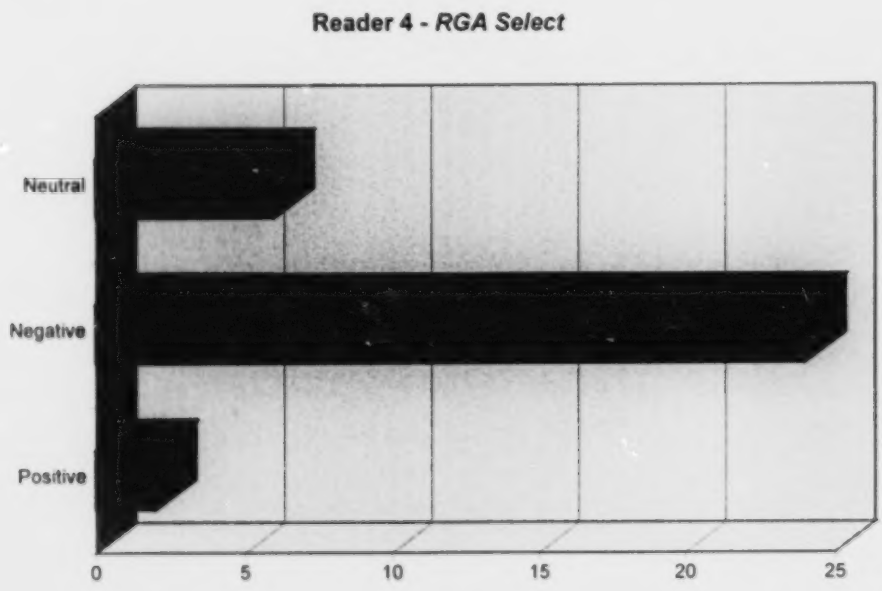


Figure 7: Chart of Reader 4's Tallies of *Readers' Guide Abstracts Select*

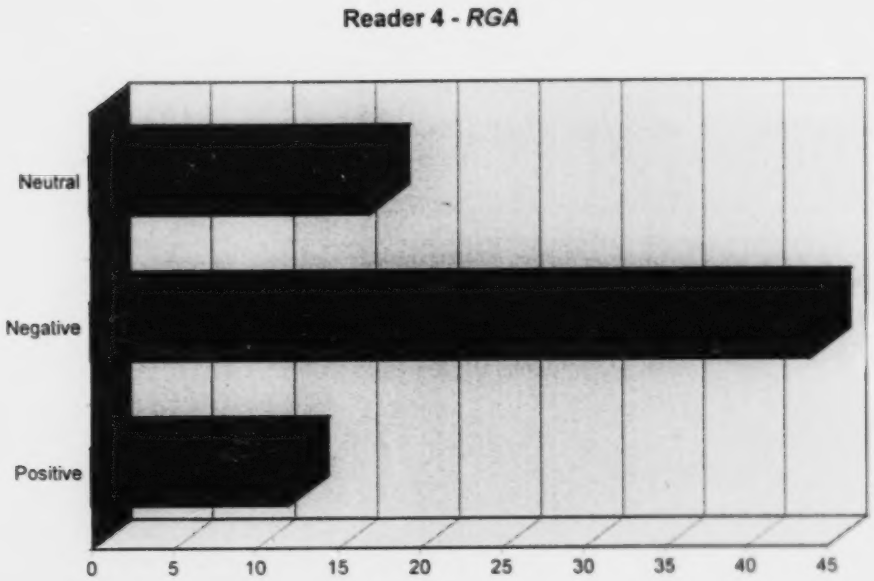


Figure 8: Chart of Reader 4's Tallies of *Readers' Guide Abstracts*

In addition, since the same variables (positive, negative and neutral) were being examined in two distinct sets (*RGA* and *RGA Select*) three paired t-tests were performed on the results to determine whether to reject or accept the null hypothesis (there is no significant difference between *RGA* and *RGA Select* as to the number of negative, positive and neutral abstracts appearing under the subject heading "bilingual education"). Since the findings indicated a difference between *RGA* and *RGA Select*, the null hypothesis could be rejected.

A cursory review of the data table (page 19) indicates that the differences between *RGA* and *RGA Select* are significant insofar as the positive and negative ratings are concerned. Cases where the mean is higher are indicative of a higher proportion of that type of article in the set. For example, the first paired t-test compared the number of

positive abstracts found in both *RGA* and *RGA Select*. The mean in *RGA* is higher than that found in *RGA Select*, demonstrating a higher proportion of positive abstracts in *RGA*.

Table 1: *RGA* and *RGA Select* Positive Abstracts

Variable	*Number of Pairs*	*Corr*	*2-tail Sig*	*Mean*	*SD*	*SE of Mean*
REGPOS				.2325	.059	.029
	4	.307	.013			
SLCTPOS				.1350	.056	.028

Table 2: Paired Differences for Positive Abstracts

Mean	*SD*	*SE of Mean*	*t-value*	*df*	*2-tail Sig*
.0975	.010	.005	20.37	3	.000

95% CI (.082, .113) (Note: Significant difference.)

The second paired t-test evaluated the number of negative abstracts coded by the raters. In this case, the mean was higher for *RGA Select*, suggesting a greater number of negative abstracts within the set. However, the difference was found to be marginally significant. It is believed that a lager sample size would have yielded statistically significant results, rather than the marginal reading arrived at in this computation.

Table 3: *RGA* and *RGA Select* Negative Abstracts

Variable	*Number of Pairs*	*Corr*	*2-tail Sig*	*Mean*	*SD*	*SE of Mean*
REGNEG				.5225	.053	.026
	4	.949	.51			
SLCTNEG				.6000	.101	.050

Table 4: Paired Differences for Negative Abstracts

Mean	*SD*	*SE of Mean*	*t-value*	*df*	*2-tail Sig*
-.0775	.054	.027	-2.88	3	.063

95% CI (-.163, .008) (Note: Marginally significant difference, with a larger N would probably be significant.)

The third paired t-test assessed the findings concerning neutral abstracts in both sets. The mean is higher in *Select*, again suggesting a difference between the two groups. The *Select* had, therefore, a larger number of neutral abstracts.

Table 5: *RGA* and *RGA Select* Neutral Abstracts

Variable	*Number of Pairs*	*Corr*	*2-tail Sig*	*Mean*	*SD*	*SE of Mean*
REGNEUT				.2300	.028	.014
	4	.906	.094			
SLCTNEUT				.2650	.062	.031

Table 6: Paired Differences for Neutral Abstracts

Mean	*SD*	*SE of Mean*	*t-value*	*df*	*2-tail Sig*
-.0350	.039	.019	-1.81	3	.168

Based on these results, the null hypothesis (as stated before) can be rejected. There is indeed a statistically significant difference between *RGA* and *RGA Select*, (see percentage table and graph on page 25). What is most interesting is that this difference is not only evident between the two sets, but also within the sets themselves. In both cases a patron would find a significantly larger number of negative abstracts. The ramifications of the study's findings will be discussed in the following sections.

Table 7: Tallies for Readers 1-4

Reader 1

RGA Select		**Percentage per Set**
Positive	5	15.625
Negative	18	56.250
Neutral	9	28.125
RGA		**Percentage per Set**
Positive	18	24.658
Negative	36	49.315
Neutral	17	23.288

Reader 3

RGA Select		**Percentage per Set**
Positive	6	18.750
Negative	18	56.250
Neutral	8	25.000
RGA		**Percentage per Set**
Positive	22	30.137
Negative	36	49.315
Neutral	15	20.548

Reader 2

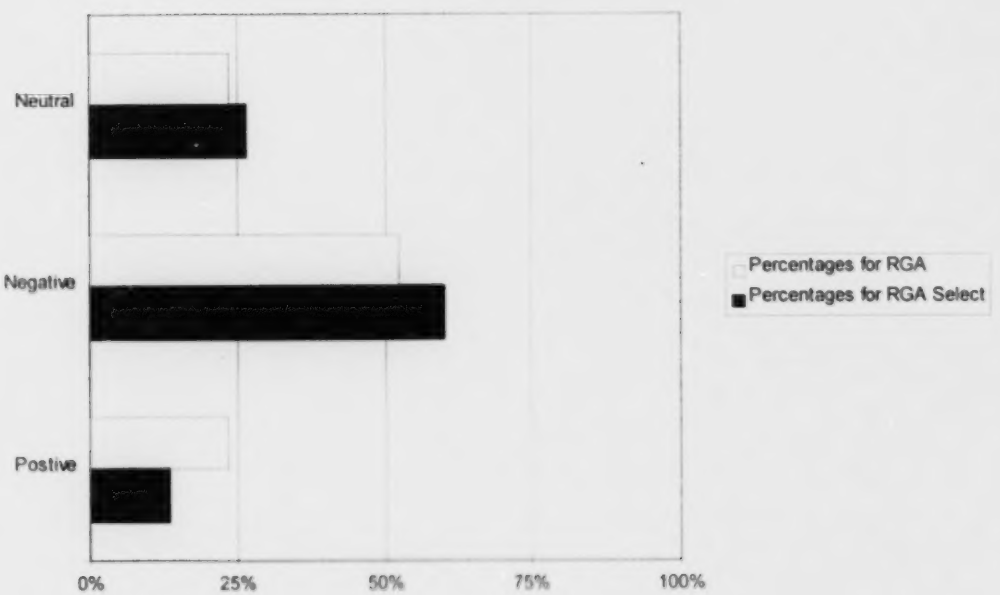
RGA Select		Percentage per Set
Positive	4	12.500
Negative	17	53.125
Neutral	11	34.375
RGA		**Percentage per Set**
Positive	16	21.918
Negative	37	50.685
Neutral	20	27.397

Reader 4

RGA Select		Percentage per Set
Positive	2	6.250
Negative	24	75.000
Neutral	6	18.750
RGA		**Percentage per Set**
Positive	12	16.438
Negative	44	60.274
Neutral	17	23.288

	Positive	Negative	Neutral
Percentages for *RGA Select*	0.13	0.60	0.27
Percentages for *RGA*	0.23	0.52	0.24

Overall Tally Percentages *RGA* vs. *RGA Select*



DISCUSSION/CONCLUSION

The results of the study definitely reveal a prevalence of negative abstracts in both *RGA* and *RGA Select*, with the *Select* version having an even higher percentage of negative abstracts available. This could be due to the selection process itself, since no policy has been mandated by the H. W. Wilson Company concerning inclusion of multiple viewpoints for representation in the database. However, there are other factors which must be considered.

Both *RGA* and *RGA Select* choose articles from general interest periodicals. Since most of the magazines picked for inclusion are read by the public at large, many of the viewpoints expressed by editorial staffs are of a conservative nature (for example, *US News and World Report* is indexed by *RGA*, as well as *Time* and *Newsweek*. Thus, the pool from which *RGA* and of course *RGA Select* has to choose is severely limited. Considering that a large number of the other periodicals indexed are hobby, vocational, sports, or arts oriented, the pool for article selection becomes even smaller. Although *The New York Review of Books*, *The New York Times*, and the *Nation* are among those represented in the database, it seems that only negative reports of bilingual education are likely to appear when a subject search is executed.

Another aspect which cannot be overlooked in considering the *RGA* situation is events which shape the news. Over the time period covered by this study, it could have indeed been the case that bilingual education programs have suffered from professional and public attacks more than in prior years. Reports of such studies, especially where taxpayer dollars are concerned, make for good headlines, and would of course be picked up in a number of general interest magazines. Unfortunately, articles by Krashen, Cummins, and Hakuta (among others who have written in support of bilingual education

over the past 8 years) appear only in specialized professional journals, and their testimonies rarely are found in materials destined for public consumption. If nothing good has been said about bilingual education, then there would be nothing good to report.

Bilingual education joins with immigration and affirmative action among the subjects which today receive negative press. Unfortunately, the fact that bilingual education is often mistakenly allied to the opposition camp for the English only movement adds to the problem. In addition, it does not help the cause that the proponents of bilingual education have yet to arrive at a consensus on what approach (transitional, 2-way, etc.) they wish to advocate.

The final factor which bears consideration is the paucity of writers who support bilingual education and who are known to the general public. Most of the editorial personnel employed by the general interest magazines are products of schools where bilingual education did not exist or where new arrivals were submersed into an English language environment upon registration. Some Hispanic writers known to the general public are vocal in their opposition to bilingual education, and like African Americans who lobby for the abolition of affirmative action, receive favorable general press coverage. The idea that someone is willing to support what many consider to be the creation of "a nation within a nation" or a "permanent underclass" does not sit well with the average American reader.

Implications

This study has implications not only for the bilingual educator, researcher, or advocate, but also for the secondary school library media specialist. *Readers' Guide* is a widely used tool from middle school through the undergraduate level, and often is the

first and only index consulted by students or public library users. Most school library practitioners teach entire units on using the *Readers' Guide*, therefore making most students familiar with its scope, access, and content. As such, it functions as the most familiar source for periodical information for a majority of the American public.

The findings demonstrated by this study should therefore be taken seriously by the school library profession. It is the responsibility of media specialists to ensure to the best of their ability that their collections meet the informational and curricular needs of the school community. This responsibility extends to CD-ROM and Internet access, as well as interlibrary loan programs. Collection development policies across the board usually support the philosophy that students will have access to properly researched information from reputable sources reflecting both sides of a given topic. It appears that the school library which uses *RGA* or *RGA Select* as its sole resource for periodical indexing would be hard pressed to present an adequate number of excellent articles supporting bilingual education programs. If the library media specialist truly wishes to adhere to the professional standards set by national, state, and local organizations, it would then be necessary to offer students access to another periodical indexing tool.

As for the bilingual education specialist or researcher, the results of the study are just as relevant. The lack of positive or even neutral abstracts in both databases boasting coverage of general interest periodicals over a 10 year period could indicate the tenuous position of bilingual education in the schema of educational issues. The neutral taxpayer who comes across a series of negative articles in his favorite news magazines or newspapers is bound to be influenced by what he/she reads over and over again. Does the lack of positive written support for bilingual education signal a possible death knell for

the movement? The National Association of Bilingual Education (NABE) as well as its affiliates should pay very close attention to these results, and respond proactively with a campaign to increase the general visibility of the many good things which are happening in bilingual education programs throughout the country. The results indicate that these positive happenings are neither reaching the audience that counts, nor receiving their just due.

Ideas for Future Research

It is obvious from this study that there exists a paucity of research concerning the use, access, and features of the new CD-ROM products available as indices to periodical contents. *RGA* is not the only commercial product existing on the market. The H. W. Wilson Company itself sells a variety of specialized databases including *Education Index*, *Social Science Index*, and *Humanities Index*. However, H. W. Wilson is not alone in this field. UMI (University Microfilms, Inc.), EBSCO, and ProQuest, are just some of the companies which offer competing yet similar items. In addition, many of these companies have equivalents to the *Select* version of *RGA* in order to tap into the high school market. It would be interesting to undertake the same study on competing materials across the industry and then compare the results. This would provide an almost exhaustive view of the coverage of bilingual education in both general interest and specialized periodicals.

It might also be worthwhile to take the study a step further and assign students research papers dealing with bilingual education, and requiring them to use either *RGA* or *RGA Select* as sources for their information. Since it has already been established that the student will encounter far more negative opinions about bilingual education than positive,

it would be interesting to poll the class as to its own opinions after completing the research. There is no doubt that people are influenced by what they read, and that students in high school are probably one of the most impressionable groups. Such a study would entail a pre and post questionnaire, as well as requiring a personal opinion statement as a part of the research paper. It would be easy to carry out in a controlled environment, and could even be extended to include a suburban control group with few if any bilingual students, and a similar class in an urban environment consisting of mainstreamed students with bilingual backgrounds.

Additional research in this area could also shed light on the perceptions of bilingual education held by the American public. If news coverage can serve as a barometer to gauge popular sentiment, then much can be learned from a more complete study. The CD-ROM databases afford the investigator access to retrospective material which heretofore required hours, if not days, of tedious research. Since content analysis is a valid research method, it can be readily applied to a variety of areas which would interest both the supporters and detractors of bilingual education.

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